

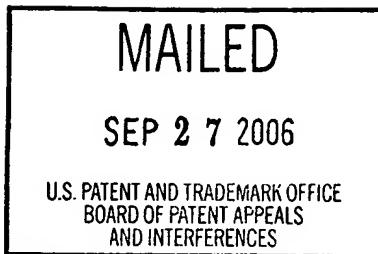
The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte STEPHEN V. DECKERS

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Appeal No. 2006-1402  
Application No. 10/788,543

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ON BRIEF

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Before FRANKFORT, OWENS and BAHR, Administrative Patent Judges.  
FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 21, 24, 26 through 28 and 31. Claims 22, 23, 25, 29, 30 and 32, the only other claims remaining in the application, have been withdrawn from further consideration. Claims 1 through 20 have been canceled.

On page 1 of the specification, appellant's invention is indicated as relating to methods and apparatus for storing data, which methods and apparatus employ hard disk data storage media which are enclosed within a cartridge shell. Page 3 of the specification makes the point that "[t]he disk cartridge is a primary focus of the instant invention, wherein the disk cartridge comprises a hard disk storage medium which is operably supported within a cartridge shell." The disk cartridge (110) is best illustrated in Figures 1 and 2 of the application drawings. Of importance to appellant is the further fact that the cartridge shell (111) of disk cartridge (110) should adhere to a known cartridge form factor, such as a tape cartridge form factor. As indicated in the paragraph bridging pages 1 and 2 of the specification,

[t]ape cartridges typically adhere to one of a plurality of accepted cartridge form factors. By "cartridge form factor" I mean a given set of standardized physical configurational and dimensional criteria which apply to the design of cartridges. Various specific data storage cartridge form factors have been developed, and include cartridge form factors known by the designations of: DAT (Digital Audio Tape); DDS (Digital Data Storage); DLT (Digital Linear Tape); and LTO (Linear Tape Open) The adherence of tape cartridges to a given known standard cartridge form factor allows for wide spread interchangeability of tape cartridges which adhere to a common form factor.

Independent claims 21 and 26 are representative of the subject matter on appeal and a copy of those claims can be found in the "Claims Appendix" attached to appellant's brief.

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The prior art references relied upon by the examiner in rejecting the appealed claims are:

Stefansky	5,329,412	Jul. 12, 1994
Kulakowski et al. (Kulakowski)	6,731,455 (filed Apr. 26, 2001)	May 04, 2004

Claims 21, 24, 26 through 28 and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kulakowski in view of Stefansky.

Rather than reiterate the examiner's full commentary regarding the above-noted rejection and the conflicting viewpoints advanced by the examiner and appellant regarding the rejection, we make reference to the answer (mailed October 27, 2005) for the examiner's reasoning in support of the rejection, and to appellant's brief (filed September 19, 2005) and reply brief (filed December 16, 2005) for the arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we have made the determinations which follow.

Concerning the rejection of claims 21, 24, 26 through 28 and 31 under 35 U.S.C. § 103(a), the examiner urges that Kulakowski discloses a data storage library per claimed invention that includes a plurality of storage areas for housing

a plurality of hard disk drive (HDD) devices like those seen in Figure 1A of the patent. The examiner goes on to note that Kulakowski is “silent as to the specifics of the HDD having form factor in the shape of a tape cartridge” (answer, page 4). To address that difference the examiner turns to Stefansky, urging that it discloses a portable hard disk drive device wherein the housing can have the dimension of a tape cartridge (col. 1, lines 55-61). From the disclosures pointed to in the applied patents, the examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of appellant’s invention to have the housing dimensions of Kulakowski’s HDD in Figure 1A coincide with the housing dimensions of a magnetic tape cartridge, as taught by Stefansky, “since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art” (answer, page 4). In addition, the examiner urges that it would have been obvious for one of ordinary skill in the art to have provided Kulakowski’s HDD with a housing having the same dimension as a magnetic tape housing “because such HDD cover had been known in the art, as demonstrated by Stefansky ‘412.”

After a review of the applied patents, we agree with the examiner that Stefansky teaches a hard disk drive cartridge having a tape cartridge form factor (see, e.g., col. 3, lines 1-3). In fact, it is our view that Stefansky actually anticipates independent claims 1 and 26 on appeal, the only claims separately argued. More specifically, it is clear to us that Stefansky teaches a storage media comprising a

housing having a tape cartridge form factor (col. 3, lines 1-3) suitable for use with some form of mechanical picker, a hard disk drive (HDD) contained within the housing, and a cartridge interface (15) coupled to the HDD and adapted to removably connect the HDD storage media to a docking device, as defined in claim 1 on appeal. As for claim 26, we note that the storage media of Stefansky includes an exterior cartridge shell (10, 12) shaped to have a tape cartridge form factor (col. 3, lines 1-3), the cartridge shell adapted to be gripped and moved by a robotic gripper to connect with a docking device, a hard disk (24) contained within the cartridge shell, and a cartridge interface (15) coupled with the hard disk and adapted to connect to a docking device and communicatively link with a host device.

On the basis of the foregoing, we will sustain the rejection of independent claims 21 and 26 under 35 U.S.C. § 103(a) as being unpatentable over Kulakowski in view of Stefansky, noting that anticipation or lack of novelty is the ultimate or epitome of obviousness. See, in that regard, In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982); In re Pearson, 494 F.2d 1399, 1402, 181 USPQ 641, 644 (CCPA 1974). As for claims 24, 27, 28 and 31, we note that appellant has chosen not to argue the separate patentability of those claims apart from the parent claim from which they depend. Thus, those claims will fall with their respective parent claim.

Contrary to appellant's arguments we find that Stefansky discloses a storage media like that defined in claims 1 and 26 on appeal, wherein the storage media is in the form of a "cartridge" and, more specifically, the form of a cartridge having a tape cartridge form factor. Page 6 of appellant's specification indicates that the term "disk cartridge" as used in the present application

means a hard disk memory medium enclosed within a cartridge shell in a configuration which allows the disk cartridge unit to be easily communicatively linked to, and communicatively unlinked from, a host device such as a computer simply by placing the disk cartridge into a docking device which acts as an intermediate interface between the disk cartridge and the host device. That is, the disk cartridge of the instant invention can be communicatively linked to another device singly as a function of the placement and position of the disk cartridge.

In our opinion, the disk drive of Stefansky in the form of a portable, plug-in module falls within the broad definition of a "cartridge" provided in appellant's specification.

As for the disk cartridge having a tape cartridge form factor, we note that the disclosure of Stefansky considered as a whole clearly evidences that the cartridge therein meets this limitation also. Note particularly, the disclosure of Stefansky at column 1 lines 56-60, where it is specifically noted that the single disk drive therein "conforms to the dimensions of a tape cassette" (emphasis added), and at column 3, lines 1-3, where it is unequivocally indicated that the hard disk drive

has “the form factor of a tape cassette” including 0.6 inch height. Thus, in contrast to appellant’s arguments (e.g., brief, page 6), Stefansky clearly indicates that the disk drive cartridge therein has more than only one dimension (i.e., height) of a tape cartridge.

Regarding appellant’s contention that Stefansky’s hard disk cartridge is not “suitable for use with a mechanical picker,” we see no reason why a mechanical picker (e.g., a robotic gripper that removes the final disk drive cartridges from a production line conveyor belt) could not grasp the sides of the housing or cartridge shell and move Stefansky’s hard disk cartridge from one location to another, without damage to the printed circuit board (14). Moreover, given that both appellant’s hard disk drive cartridge and that of Stefansky each have a “tape cartridge form factor,” we fail to see how appellant’s cartridge could be “suitable for use with a mechanical picker,” if that of Stefansky were not.

While we might agree with appellant’s argument that there is nothing in either Kulakowski or Stefansky which would have led one of ordinary skill in the art to modify the dual-ended hard disk drive cartridge (2) seen in Figure 1A of Kulakowski to necessarily have a tape cartridge form factor, we note that Kulakowski specifically indicates that the hard disk drives (58) used therein can be either the dual-ended version or other hard disk drives known in the art (see, for example, col. 5, lines 35-39, and col. 6, lines 10-15).

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In summary: we have sustained the rejection of claims 21, 24, 26 through 28 and 31 under 35 U.S.C. § 103(a). Therefore, the decision of the examiner is affirmed.

However, since our rationale used to sustain the rejection is considerably different than that of the examiner, we feel that the thrust of the rejection has been altered to such an extent that we are compelled to denominate the affirmance of the rejection as being a NEW GROUND OF REJECTION under 37 CFR § 41.50(b).

This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .



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(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

AFFIRMED

**NEW GROUND OF REJECTION UNDER**  
**37 CFR § 41.50(b)**

Charles E. Frankfort

CHARLES E. FRANKFORT  
Administrative Patent Judge

Terry J. Owens

TERRY J. OWENS

## Administrative Patent Judge

  
JENNIFER D. BAHR

JENNIFER D. BAHR

## Administrative Patent Judge

# BOARD OF PATENT APPEALS AND INTERFERENCES

CEF/vsh

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